

## **BLANK PAGE**



IS: 10450 - 1983

# Indian Standard CODE FOR TRANSPORT OF FRESH WATER AQUARIUM FISH

UDC 639.337; 639.34



@ Copyright 1983

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

### Indian Standard

# CODE FOR TRANSPORT OF FRESH WATER AQUARIUM FISH

#### Live Animals Sectional Committee, AFDC 24

Chairman

Representing

DR H. G. SEN

Organon (India) Limited, Calcutta

Members

DR V. S. ALWAR

Animal Welfare Board (Ministry of Agriculture), Madras

DR S. R. CHADHA ( Alternate )
ANIMAL HUSBANDRY COMMISSIONER

Animal Husbandry Commissioner to the Government of India (Ministry of Agriculture), New

DR B. R. BALIGA

Delhi
Central Food Technological Research Institute
(CSIR), Mysore

DR M. A. HALEEM ( Alternate )
DR M. S. BHAMJI

Indian Council of Medical Research, New Delhi

DR S. JAYARAMAN ( Alternate )
DR K. R. BHARDWAJ
DR J. N. S. YADAVA ( Alternate )

Central Drug Research Institute ( CSIR ), Lucknow )

DR D. P. BUDUK

Haffkine Bio-pharmaceutical Corporation Limited, Bombay

DR A. Y. NIMBKAR ( Alternate )
DR P. R. CHANDRAN
SHRI C. P. CHANDRASEKHARAN

Zoological Gardens, Trivandrum

DR G. P. DAS DR D. C. BANIK ( Alternate ) Railway Board (Ministry of Railways), New Delhi

DR P. J. DEORAS
DR P. K. GANGOPADHYAY

Sarabhai Research Centre, Vadodara

DR S. K. MITRA ( Alternate )

In personal capacity (341-A Sahitya Sahawas, Bandra East, Bombay) Indian Institute of Chemical Biology (CSIR),

SHRI A. D.' LIMA

Calcutta

HRI A. D.' LIMA
SHRI FELIX NORONHA ( Alternate )

Air India, Bombay

DR DEV RAJ NARANG

Delhi Society for the Prevention of Cruelty to Animals, Delhi

HONORARY SECRETARY ( Alternate )

(Continued on page 2)

#### © Copyright 1983

#### INDIAN STANDARDS INSTITUTION

This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

#### IS: 10450 - 1983

(Continued from page 1)

Members

DR A. V. NATARAJAN

DR K. L. SEHGAL ( Alternate )

DR P. R. PABRAI SHRI S. C. GUPTA ( Alternate )

SHRI T. E. PATTERSON

SHRI D. D. DHAWAN ( Alternate )

DR R. S. PRASAD DR R. R. RAO

SHRI M. M. MATHEWS ( Alternate )
DR K. A. REDDY Cen

Brig P. D. Saksena

DR SATISH KUMAR

DR H. S. PANDEY ( Alternate ) DR ( SMT ) SARALJIT SEHGAL

DR HARI OM GUPTA ( Alternate ) SHRI U. K. SHARMA

SHRI-G. P. BHATNAGAR ( Alternate )
DR BRIJPAL SINGH Cen

DR MANOHAR SINGH

DR G. P. GROVER ( Alternate )
PROF P. N. SRIVASTAVA
MAI-GEN S. N. SRIVASTAVA

MAJ-GEN S. N. SRIVASTAVA SHRI M. E. THOMAS

SHRIMATI P. MOHAN ( Alternate DB T. R. THYAGARAJAN DR S. P. SHARMA ( Alternate ) DR T. N. VAISHNAY

DR B. M. L. VARMANI

DR J. L. KAW ( Alternate ) SHRI T. PURNANANDAM, Director ( Agri & Food ) Representing

Central Inland Fisheries Research Institute (ICAR), Barrackpore

Directorate General of Health Services, New Delhi

T. E. Patterson (India) Private Limited, New Delhi

University of Kerala, Trivandurm

Ciba-Geigy Research Centre, Bombay

Central Poultry Breeding Farm (Ministry of Agriculture), Bombay

In personal capacity (E-20, Saket, New Delhi) Indian Veterinary Research Institute (ICAR), Izatnagar

National Institute of Communicable Diseases, New Delhi

Indian Airlines Corporation, New Delhi

Central Avian Research Institute (CSIR), Bareilly Director of Animal Husbandry Haryana, Chandigarh

University Grants Commission, New Delhi
Directorate of Remount Veterinary Services, Army
Headquarters, New Delhi
Chief Controller of Imports and Exports, New Delhi

Indian Drugs and Pharmaceuticals Ltd, Rishikesh

Director of Animal Husbandry, Gujarat State, Ahmadabad

Industrial Toxicology Research Centre (CSIR), Lucknow

Director General, ISI ( Ex-officio Member )

Secretary

SHRI LAJINDER SINGH Deputy Director (Agri & Food), ISI

## Indian Standard

# CODE FOR TRANSPORT OF FRESH WATER AQUARIUM FISH

#### O. FOREWORD

- 0.1 This Indian Standard was adopted by the Indian Standards Institution on 31 January 1983, after the draft finalized by the Live Animals Sectional Committee had been approved by the Agricultural and Food Products Division Council.
- 0.2 The live fish transport has been practised in India since time immemorial in open containers, with renewal of water at intervals. Recent advancements in thermal insulating materials and techniques of packing in polyethylene bags sealed with oxygen have almost replaced the traditional system. The aquarium fish stand well in this type of transport. The fish are properly conditioned to avoid heavy mortality during transport. The conditioning involves isolation of healthy specimen specieswise and keeping them in a tank either made of cement concrete or cloth HAPA planted in lenitic or lotic waters for a period (not beyond 6 hrs), which is regulated depending on the length of the distance and duration of transport.
- 0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS: 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

#### 1. SCOPE

1.1 The scope of this code is restricted to the conditions for transport of live aquarium fish (tropical and ornamental fresh water species) for exhibition and/or breeding purposes.

<sup>\*</sup>Rules for rounding off numerical values ( revised ).

#### IS: 10450 - 1983

#### 2. GENERAL REQUIREMENTS

- 2.1 The fresh water fish selected shall be disease-reistant and healthy before conditioning and packing for transport.
- 2.2 The fish shall be protected from extreme climatic conditions and any kind of stress.
- 2.3 As far as possible the fish to be packed and transported shall be of the same species/variety/strain and size. The number of fish to be packed in each container/shall depend on species/variety/strain and size.
- 2.4 All aquarium fish shall be transported by air and direct flights for long distances and by the fastest train for short distances.
- 2.5 The polyethylene bags holding live aquarium fish shall be filled 50 percent of its capacity with oxygen under a pressure of 0.5 kg per cm<sup>2</sup> and mouth of the bag shall be tied tightly so as to prevent escape of oxygen during transport.
- 2.6 During transport, as far as possible, jolts, splashes and any other kind of shocks shall be avoided.

#### 3. PACKING REQUIREMENTS

- **3.1** Only tested, leakproof and thick (not less than 75 micron) polyethylene bags of the following dimensions shall be used for packing of aquarium fish:
  - a)  $62 \times 40 \text{ cm}$ ,
  - b)  $60 \times 30$  cm, and
  - c)  $55 \times 20$  cm.
- **3.2** The polyethylene bags of the dimensions given above, used to hold live fish, shall be packed in 16.5 litres rectangular oil cans provided with lids or reinforced cardboards cartons of sturdy texture.
- **3.3** The reinforced cardboard cartons shall be insulated with thermocole lining from inside.
- 3.4 The polyethylene bag shall be filled with fresh, pure and filtered water to 40 to 50 percent of its capacity.
- 3.5 Certain fishes like trigger fish, catfish, prawns, lobsters, etc, shall first be packed individually in a separate bag having sufficient holes and then put in the outer polyethylene bag containing fresh, pure and filtered water.

3.6 Loading and unloading shall be undertaken quickly and be done immediately after the arrival of the consignment. When cardboard cartons are used they shall be handled carefully and gently during storage operations in aircraft, train, etc.

#### 4. LABELLING

- **4.1** Each packing box, whether rectangular can or cardboard carton, shall bear a label giving following information legibly and indelibly:
  - a) Name of the fish species;
  - b) Strain of fish;
  - c) Name, address and telephone number of the consignor; and
  - d) Name, address and telephone number of the consignee.
- 4.2 Each container shall be also marked with cautionary notice reading as under:

#### 'TOP PRIORITY, LIVE FISH, HANDLE WITH CARE'

**4.3** Further the cardboard carton or can shall bear on the face a red arrow showing the upper side.

#### INDIAN STANDARDS

#### ON

#### TRANSPORT OF LIVE ANIMALS

IS:				
3059-1981	Code for transport of monkeys by air (first revision)			
3699	Code for transport of monkeys by land:			
( Part I )-1978	Transport from trapping area to the nearest rail head (first revision)			
( Part II.)-1978	Transport from rail-head to the nearest airport ( second revision )			
3907	Code of practice for transport of laboratory animals:			
( Part I )-1977	Transport of mice, rats, rabbits, guinea pigs and cotton rates and hansters (first revision)			
( Part II )-1967	Transport of snakes			
( Part III )-196	7 Transport of frogs			
4157	Code for transport of livestock:			
( Part I )-1981	Code for transport of equines (horses, ponies mules and donkey by rail, road, air and sea (first revision)			
( Part II )-1968	Transport of cattle by rail and road			
( Part III )-198	3 Transport of sheep and goats by rail and road			
4746-1968	Code for transport of dogs and cats by rail, road and air			
5236-1982	Gode for transport of pigs by rail and road (first revision)			
5237-1969	Code for transport of small and medium size seed eating birds			
5238	Code for transport of poultry:			
( Part I )-1982	Transport of day-old chicks and turkey poults (first revision)			
( Part II )-1982	Transport of poultry other than day old thicks and turkey poults (first revision)			